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STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

3100 Port of Benton Blvd • Richland, WA 99352 • (509) 372-7950

June 6, 2007

Ms. Shirley J. Olinger, Acting Manager  
Office of River Protection  
United States Department of Energy  
P.O. Box 450, MSIN: H6-60  
Richland, Washington 99352

Mr. William S. Elkins, Project Director  
Bechtel National, Inc.  
2435 Stevens Center Place, MSIN: H4-02  
Richland, Washington 99354

Re: Submittal of Hanford Facility RCRA Permit Modification Notification Form 24590-HLW-PCN-ENV-06-010; Class 1 Modification to the Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion for the Treatment, Storage, and Disposal of Dangerous Waste, Part III, Operating Unit 10 (Waste Treatment and Immobilization Plant), WA7890008967

Dear Ms. Olinger and Mr. Elkins:

The Department of Ecology approves the referenced Class 1 Modification. Enclosed is the approved Hanford Facility RCRA Permit Modification Notification Form.

Modification 24590-HLW-PCN-ENV-06-010 provides the updated Engineering Specification for Vessel-Mounted Vertical Transfer Pumps – High Level Waste Facility, 24590-WTP-3PS-MPC0-TP009.

If there are any questions, contact me at 509-372-7882 or Ed Fredenburg at 509-372-7899.

Sincerely,

Brenda Becker-Khaleel  
Lead WTP Permit Writer  
Nuclear Waste Program

trw/jc  
Enclosure

cc: See next page

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Ms. Olinger and Mr. Elkins

June 6, 2007

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cc electronic w/enc:

John Eschenberg, USDOE

Lori Huffman, USDOE

Tony McKarns, USDOE

Gae Neath, USDOE

Don Sommer, USDOE

William Taylor, USDOE

Julie Atwood, BNI

Brad Erlandson, BNI

Peggy Fisher, BNI

Stan Hill, BNI

Dennis Klein, BNI

Sandi Murdock, BNI

Phil Peistrup, WGI

cc w/enc:

Administrative Record: Tank Waste Treatment Requirements ✓ 4-0-8

Environmental Portal

USDOE-ORP Correspondence Control

Quarter Ending 03/31/2007

24590-HLW-PCN-ENV-06-010

**Hanford Facility RCRA Permit Modification Notification Form**

Unit:

**Waste Treatment and Immobilization Plant**

Permit Part &amp; Chapter:

**Part III, Chapter 10 and Attachment 51**Description of Modification:

The purpose of this modification is to update *Engineering Specification for Vessel-Mounted Vertical Transfer Pumps - HLW Facility*, 24590-WTP-3PS-MPC0-TP009, currently located in Appendix 7.7 of the Dangerous Waste Permit (DWP). The updated specification includes additional design details, such as an upgraded material of construction for wetted components, nuclear safety definitions, operational and maintenance clarifications, editorial changes, and other changes. Changes in this document are marked by sidebars.

The following are the major changes to the above mentioned document:

- Added definitions relative to nuclear safety; such as additional-protection class structures, systems, and components (APC SSC); based on the WTP implementation of DOE-STD-3009-94, *Preparation Guide for U. S. Department of Energy Nonreactor Nuclear Facility Safety analysis Reports* (Section 1.4)
- Editorial change: clarified requirements for exceptions and date or revision of industry codes and standards (Section 2.1.2 and throughout the document)
- Clarified that the normal maintenance period is 5 years (Section 3.2.1)
- Added requirements for "harsh environment" and referenced *Engineering Specification for Environmental Qualification of Control and Electrical Systems and Components* (Section 3.3)
- Expanded design details specified in Section 3.5.7 such as maximum weight and the addition of stabilizing arm for the suction nozzle pin
- Updated design parameters and operational requirements, added a reference to Appendix B (Section 3.6)
- Updated requirements for drive motors, added a reference to Appendix B (Section 3.7)
- Specified solid Stellite 12 material for all wetted components in contact with high-velocity fluid (Section 4.1.4). The Stellite 12 is an upgrade from Ultimet since it may last approximately 2.5 times as long as Ultimet.
- Specified components requiring PMI testing (Section 4.2.1)
- Further clarified fabrication and shop testing criteria (Sections 5 and 6)
- Updated Appendix B Table Typical Chemical Composition of Slurries
- Other editorial changes, such as updated references and standards, are located throughout the document.

Please replace the following document in Appendix 7.7 of the Dangerous Waste Permit.

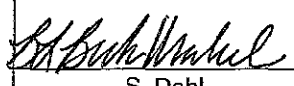
Appendix 7.7				
Replace:	24590-WTP-3PS-MPC0-TP009, Rev. 0	With:	24590-WTP-3PS-MPC0-TP009, Rev. 1	
WAC 173-303-830 Modification Class: <sup>12</sup>	Class 1	Class <sup>1</sup> 1	Class 2	Class 3
Please mark the Modification Class:	X			
Enter Relevant WAC 173-303-830, Appendix I Modification citation number:		A.1, A.3		
Enter wording of WAC 173-303-830, Appendix I Modification citation:				
A. General Permit Provisions				
1. Administrative and informational changes				
3. Equipment replacement or upgrading with functionally equivalent components (e.g., pipes, valves, pumps, conveyors, controls)				

<sup>1</sup> Class 1 modifications requiring prior Agency approval.

<sup>2</sup> If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to a Class '1, if applicable.

Quarter Ending 03/31/2007

24590-HLW-PCN-ENV-06-010

<p>Modification Approved: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (state reason for denial)</p> <p><u>Reason for denial:</u></p>	<p>Reviewed by Ecology:</p> <p> <u>6/6/07</u></p> <p>S. Dahl Date</p>
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